No Objection To Declassification in Full 2010/08/27: LOC-HAK-215-5-24-1 This document consists of 5

STURE

ATOMIC ENERGY COMMISSION

WASHINGTON, D.C. 20545

No. / of 2/ Copies, Series

MAY 1 5 1973

OFFICE OF THE CHAIRMAN

DOE REVIEWED 16-Jun-2010: DECLASSIFIED FOR RELEASE IN FULL

Brent Scowcroft, Brigadier General, USAF Deputy Assistant to the President for National Security Affairs

PROPOSED US-USSR BILATERAL AGREEMENT

The draft text of a proposed US-USSR bilateral agreement in the peaceful uses of atomic energy, which was transmitted with your memorandum of May 11, has been received and the informal view of the Commission is that such an agreement, with some modification, would be viewed as an attractive opportunity leading to very worthwhile joint endeavors.

The advantages and disadvantages which we see, together with possible modifications directed toward making the agreement acceptable, are attached. One of the major reservations which we have concerns the proposed joint construction of controlled thermonuclear research (CTR) installations. This could have the serious effect of delaying progress on both sides.

We do see the possibility, however, of jointly constructing a high energy physics laboratory to be located either in the United States or the USSR. An informal proposal for such a program has been made by the Director of the Soviet Novosibirsk Laboratory to the Director of our Stanford Linear Accelerator Laboratory in Palo Alto. We have this program under active study and would hope to make it a part of any future negotiation of the proposed agreement.

We shall be pleased to provide any further information you may desire.

Enclosures:

1. Advantages and Disadvantages

2. Proposed Revisions

CLASSIFIED BY: A. S. Friedman, Director

Div. of International Programs

exempt from general declassification schedule of ENECUTIVE ORDER 11852 EMELIPTION CATEGORY SCS. () AUTOMATICALLY DECLASSIFIED ON -

(effective care or event, if any)

NATIONAL SECURITY INFORMATION Unauthorized Disclosure Subject ta Criminal Sanctions.

ADVANTAGES AND DISADVANTAGES

- 1. The agreement would formalize the current cooperation by combining the approvals of both the executive and legislative branches of the Government. (It is assumed, since the agreement is for a long term and budget authorizations would be required for implementation, that the Congress would be consulted.) Consultation with the Congress, however, will call for setting forth plans and programs for cooperation in greater detail than is currently available. This formalization and consultation may also tend to decrease somewhat the flexibility available under the present system of executive agreements which provide for cooperation in reactors, high energy physics and CTR.
- 2. The agreement would have the advantage of presumably increasing USAEC access to USSR developments in the three areas specified. In the area of CTR, for example, the Soviet CTR program is about three times the size of the U.S. program. It is much broader based and is particularly strong in analytic theory. The U.S. program is smaller and is more directed toward specific goals. The U.S. program has better technology, computer capability and instrumentation. The Soviets have a very good capability for fabrication of large facilities.
- 3. While the U.S. would obtain additional information, the USSR has much to gain in support areas such as computers, codes, and integrated circuits. Exchanges in instrumentation, equipment and construction materials could be expected to be of more benefit to the USSR than to the U.S. The field of experimental data processing equipment is a sensitive political area and some of the materials and equipment that would be exchanged are now embargoed for export. Any relaxation should be on a case-by-case basis rather than a blanket arrangement.
- 4. It is difficult to persuade U.S. scientists to accept long-term assignments in the USSR because of the difficult living conditions there. Short-term visits are not a problem in this respect.

- 5. In the fields of fast reactors and fundamental properties of matter, patterns of cooperation with other countries already exist. In CTR, however, while the proposed agreement would not, in fact, limit cooperation with other groups (e.g. the Europeans and Japanese) it could tend to discourage other bilateral agreements for both sides.
- 6. It would be important that both countries reveal to each other the full extent of their CTR programs. A question arises as to how to deal with laser fusion and other weapons related CTR approaches. Also, recent intelligence information tends to imply that the Soviets may have some large CTR activities which they have not revealed.
- 7. Joint CTR construction projects would be extremely difficult because of major differences in engineering approach, technologies, standards, methods of budgeting and others. Also, if the "Iron Curtain" were to drop again, one country or the other could be shut out from the project. While joint constructions are difficult, joint design efforts, joint prefabrication development and cooperative instrumentation coordination are feasible in the CTR program.
- 8. Although the AEC and State Committee on Atomic Energy are designated as the Executive Agents for the agreement, the agreement should serve as a channel for cooperation with other agencies of each government which are engaged in programs related to the subjects of the agreement.

TEARLY

No Objection To Declassification in Full 2010/08/27: LOC-HAK-215-5-24-1

PROPOSED REVISIONS

- 1. It is suggested that the document be referred to as a memorandum of understanding rather than an agreement to avoid the impression it falls into the category of a Section 123 agreement under the Atomic Energy Act.
- The area of cooperation described as "study of fundamental properties of matter" is not well defined. One might imply that it is meant to cover only high energy physics, but the words in the draft agreement are broad and could also cover medium, low energy, and solid state physics. "Other installations" (page 4) could cover colliding beam facilities, reactors, Van de Graaf accelerators, et al. This entire matter should be clarified.
- 3. In the final preambulatory paragraph, it is suggested that the agreement be carried forward "in recognition of" existing agreements rather than "in accordance with" them since its term would far exceed theirs.
- 4. It is suggested that the final paragraph on page 3 be revised as follows:

"The aim of cooperation in the area of controlled thermonuclear fusion will be for cooperative design and development leading to demonstrational thermonuclear reactors. This would include calculational and theoretical substantiation, conduct of joint scientific and research work, designing and development to calculated parameters for smaller scale experiments, and subsequently to reactors. There would be elaboration of industrial technologies for thermonuclear energy production based upon such reactors."

- it relates to fast breeder reactors, page 4, "Cooperation in the field of fast-breeder reactors will be aimed at jointly solving the problems connected with the development, programming, designing and operation of atomic power plants with fast-breeder reactors;", the use of the word "programming" is not clear. Alternate language that might be suggested would be "Cooperation in the field of fast-breeder reactors will be aimed at jointly solving problems connected with the design, development, construction and operation of atomic power plants with fast-breeder reactors;".
- 6. The phrase "Joint development and construction of new experimental equipment and installations" (page 4, and a similar phrase on the top of page 5) should be clarified to ensure that it covers joint construction of large accelerator facilities.
- 7. The phrase "Exchange of the samples of instrumentation, equipment and construction materials" (page 5) should be clarified; particularly, what is meant by "samples"?
- 8. The meaning of "permanent groups" at the bottom of page 4 should be clarified.
- 9. It is suggested that the last paragraph of Article VII indicate that the validity of agreements and contracts will not be affected, provided, however, that they will be deemed to be governed by the provisions of the terminated basic document.